

STATE OF CALIFORNIA
Budget Change Proposal - Cover Sheet
DF-46 (REV 08/17)

| | | | |
|---|-----------------------|--|--------------|
| Fiscal Year 2019-20 | Business Unit 3600 | Department California Department of Fish and Wildlife | Priority No. |
| Budget Request Name 3600-014-BCP-2019-GB | | Program 2590 | Subprogram |

Budget Request Description
Nutria Eradication and Control Program

Budget Request Summary

The California Department of Fish and Wildlife requests \$1,949,000 General Fund and 10 positions, and \$1,624,000 ongoing thereafter, to fund a program to eradicate nutria, a highly invasive, non-native, semi-aquatic rodent, from the state before the population expands exponentially to a point where it cannot be controlled.

| | | |
|---|--|------|
| Requires Legislation <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Code Section(s) to be Added/Amended/Repealed | |
| Does this BCP contain information technology (IT) components? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If yes, departmental Chief Information Officer must sign.</i> | Department CIO | Date |

For IT requests, specify the project number, the most recent project approval document (FSR, SPR, S1BA, S2AA, S3SD, S4PRA), and the approval date.

Project No. Project Approval Document: Approval Date:

If proposal affects another department, does other department concur with proposal? ☐ Yes ☐ No
Attach comments of affected department, signed and dated by the department director or designee.

| | | | |
|---------------------|------|------------------|------|
| Prepared By | Date | Reviewed By | Date |
| Department Director | Date | Agency Secretary | Date |

Department of Finance Use Only

Additional Review: ☐ Capital Outlay ☐ ITCU ☐ FSCU ☐ OSAE ☐ CALSTARS ☐ Dept. of Technology

| | |
|--|---|
| PPBA Original Signed By Sergio Aguilar | Date submitted to the Legislature JAN 10 2019 |
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BCP Fiscal Detail Sheet

BCP Title: Nutria Eradication and Control Program

BR Name: 3600-014-BCP-2019-GB

Budget Request Summary

| | FY19 | | | | | |
|--|------------|----------------|----------------|----------------|----------------|----------------|
| | CY | BY | BY+1 | BY+2 | BY+3 | BY+4 |
| Personal Services | | | | | | |
| Positions - Permanent | 0.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Total Positions | 0.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Salaries and Wages | | | | | | |
| Earnings - Permanent | 0 | 645 | 645 | 645 | 645 | 645 |
| Total Salaries and Wages | \$0 | \$645 | \$645 | \$645 | \$645 | \$645 |
| Total Staff Benefits | 0 | 355 | 355 | 355 | 355 | 355 |
| Total Personal Services | \$0 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 |
| Operating Expenses and Equipment | | | | | | |
| 5301 - General Expense | 0 | 50 | 50 | 50 | 50 | 50 |
| 5302 - Printing | 0 | 10 | 10 | 10 | 10 | 10 |
| 5304 - Communications | 0 | 10 | 10 | 10 | 10 | 10 |
| 5306 - Postage | 0 | 10 | 10 | 10 | 10 | 10 |
| 5320 - Travel: In-State | 0 | 50 | 50 | 50 | 50 | 50 |
| 5322 - Training | 0 | 50 | 50 | 50 | 50 | 50 |
| 5324 - Facilities Operation | 0 | 110 | 110 | 110 | 110 | 110 |
| 5326 - Utilities | 0 | 20 | 20 | 20 | 20 | 20 |
| 5342 - Departmental Services | 0 | 264 | 219 | 219 | 219 | 219 |
| 5346 - Information Technology | 0 | 60 | 20 | 20 | 20 | 20 |
| 5368 - Non-Capital Asset Purchases - Equipment | 0 | 60 | 0 | 0 | 0 | 0 |
| 539X - Other | 0 | 255 | 75 | 75 | 75 | 75 |
| Total Operating Expenses and Equipment | \$0 | \$949 | \$624 | \$624 | \$624 | \$624 |
| Total Budget Request | \$0 | \$1,949 | \$1,624 | \$1,624 | \$1,624 | \$1,624 |

Fund Summary

| | | | | | | |
|--|------------|----------------|----------------|----------------|----------------|----------------|
| Fund Source - State Operations | | | | | | |
| 0001 - General Fund | 0 | 1,949 | 1,624 | 1,624 | 1,624 | 1,624 |
| Total State Operations Expenditures | \$0 | \$1,949 | \$1,624 | \$1,624 | \$1,624 | \$1,624 |
| Total All Funds | \$0 | \$1,949 | \$1,624 | \$1,624 | \$1,624 | \$1,624 |

Program Summary

| | | | | | | |
|--|------------|----------------|----------------|----------------|----------------|----------------|
| Program Funding | | | | | | |
| 2590 - Biodiversity Conservation Program | 0 | 1,949 | 1,624 | 1,624 | 1,624 | 1,624 |
| Total All Programs | \$0 | \$1,949 | \$1,624 | \$1,624 | \$1,624 | \$1,624 |

Personal Services Details

| Positions | Salary Information | | | | | | | | |
|---|--------------------|----------------|----------------|----------------|----------------|----------------|-------------|-------------|-------------|
| | Min | Mid | Max | CY | BY | BY+1 | BY+2 | BY+3 | BY+4 |
| 0756 - Environmental Program Mgr I (Supvry) (Eff. | | | | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 0762 - Environmental Scientist (Eff. 07-01-2019) | | | | 0.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 0765 - Sr Envirnal Scientist (Spec) (Eff. 07-01- | | | | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 0916 - Fish & Wildlife Techn (Eff. 07-01-2019) | | | | 0.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |
| 5393 - Assoc Govtl Program Analyst (Eff. 07-01- | | | | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 5731 - Research Data Analyst II (Eff. 07-01-2019) | | | | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Total Positions | | | | 0.0 | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 |
| Salaries and Wages | CY | BY | BY+1 | BY+2 | BY+3 | BY+4 | | | |
| 0756 - Environmental Program Mgr I (Supvry) (Eff. | 0 | 115 | 115 | 115 | 115 | 115 | | | |
| 0762 - Environmental Scientist (Eff. 07-01-2019) | 0 | 129 | 129 | 129 | 129 | 129 | | | |
| 0765 - Sr Envirnal Scientist (Spec) (Eff. 07-01- | 0 | 88 | 88 | 88 | 88 | 88 | | | |
| 0916 - Fish & Wildlife Techn (Eff. 07-01-2019) | 0 | 174 | 174 | 174 | 174 | 174 | | | |
| 5393 - Assoc Govtl Program Analyst (Eff. 07-01- | 0 | 68 | 68 | 68 | 68 | 68 | | | |
| 5731 - Research Data Analyst II (Eff. 07-01-2019) | 0 | 71 | 71 | 71 | 71 | 71 | | | |
| Total Salaries and Wages | \$0 | \$645 | \$645 | \$645 | \$645 | \$645 | | | |
| Staff Benefits | | | | | | | | | |
| 5150450 - Medicare Taxation | 0 | 12 | 12 | 12 | 12 | 12 | | | |
| 5150500 - OASDI | 0 | 43 | 43 | 43 | 43 | 43 | | | |
| 5150600 - Retirement - General | 0 | 190 | 190 | 190 | 190 | 190 | | | |
| 5150800 - Workers' Compensation | 0 | 14 | 14 | 14 | 14 | 14 | | | |
| 5150900 - Staff Benefits - Other | 0 | 96 | 96 | 96 | 96 | 96 | | | |
| Total Staff Benefits | \$0 | \$355 | \$355 | \$355 | \$355 | \$355 | | | |
| Total Personal Services | \$0 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | \$1,000 | | | |

A. Budget Request Summary

The California Department of Fish and Wildlife (CDFW) requests \$1,949,000 General Fund in Fiscal Year 2019-20 and 10 positions, and \$1,624,000 ongoing thereafter, to fund a program to eradicate nutria, a highly invasive, non-native, semi-aquatic rodent, from the State before the population expands exponentially to a point where it cannot be controlled.

B. Background/History

Nutria (*Myocastor coypus*) are large, semi-aquatic rodents native to South America and are highly invasive in the United States. Nutria were not known to be present in the wild in California until March 2017 when a nutria was captured in the wetlands of Merced County. Since then, more than 363 nutria have been captured or documented in six Central Valley counties (Merced, Stanislaus, Tuolumne, Fresno, San Joaquin, and Mariposa). Based on what is known about nutria and their current reproductive rate and distribution, without immediate action, nutria will rapidly expand their numbers and geographic presence and cause extensive damage to wetlands, riparian habitat, restoration projects, levees, water conveyance and flood-protection infrastructure, and agriculture. Immediate removal of this invasive species will minimize the total cost and effort required to achieve eradication, minimize near-term impacts, and prevent perpetual impacts and on-going costs to the State.

Nutria are regulated as a detrimental, restricted animal by CDFW because they pose a threat to native wildlife, the agriculture interests of the state, and to public health and safety, (14 CCR § 671), and are an A-rated pest by the Department of Food and Agriculture (CDFA). While CDFW does not have specific laws that compel action be taken to remove detrimental species, it is incumbent upon CDFW to take action to protect the diverse fish, wildlife, and plant resources, and the habitats upon which they depend, for their ecological values and for their use and enjoyment by the public.

Preemptive action to eradicate nutria will prevent public and private landowners and managers from incurring even further additional costs to prevent or repair nutria damage. It will also preserve native and restored habitats and their species (including rare and game species), which depend on them, maintain water quality and reliability, maintain the integrity of flood control infrastructure, and protect the agricultural industry, all integral to the economy of California.

CDFW initiated an Incident Command System (ICS) in March 2018 and has assumed the leadership role in coordinating a multi-agency effort to eradicate nutria. In Fiscal Year 2017-18, CDFW redirected over 40 permanent staff and \$672,000 to remove nutria in order to prevent population growth and dispersal, while concurrently delineating the area of nutria infestation. In Fiscal Year 2018-19, an additional \$528,000 was redirected to continue efforts to prevent population growth.

The Nutria Eradication Project is currently operating with one dedicated staff (Environmental Scientist); the remaining staff were redirected from other projects throughout CDFW. CDFW currently has approximately \$230,000/year available in its Invasive Species Program for statewide invasive species management. CDFW has secured \$1.8 million in state grants from the Delta Conservancy and Wildlife Conservation Board and \$1.25 million in a Federal grant from the U.S. Fish and Wildlife Service (USFWS) State Wildlife Grant Program that can be utilized Statewide for Fiscal Years 2019-2022. CDFW has also obligated \$238,000 through the Federal Trust Fund for eradication efforts specific to the Central Region. These funds can be utilized through the end of the 2018-19 Fiscal Year.

As of December 2018, CDFW has surveyed approximately 97,440 acres and removed more than 363 nutria. In addition to field efforts, CDFW has worked to develop electronic data collection and management systems, secure permission to access public and private property to survey and trap, secured short-term grant funding, contracted trapping services, shared information broadly, and engaged and enlisted assistance from other agencies, stakeholders, and the public. CDFW has contracted with USDA Wildlife Services to assist with field efforts. Wildlife Services has been instrumental in providing support, data, and expertise developed from their successful nutria eradication project in Maryland (Chesapeake Bay.)

In the 2018 Budget Act, CDFA received \$400,000 per year for Fiscal Years 2018-19 and 2019-20 to implement nutria surveys. CDFA anticipates implementing their survey efforts in concert with CDFW's priorities, and they will utilize CDFW's data collection and management systems.

Analysis of Problem

The Department of Water Resources (DWR) is also engaged and collaborating with CDFW to identify how to contribute to the effort. Various California Natural Resources Agency boards and commissions have engaged with CDFW on the effort and pledged to assist within their existing means and appropriate jurisdictions. Staff from the USFWS San Joaquin River National Wildlife Refuge have also provided short-term assistance with surveys on their properties.

Resource History (Dollars in thousands)

| Program Budget | PY - 4 | PY - 3 | PY - 2 | PY - 1 | PY |
|--|--------|--------|--------|--------|-----|
| Authorized Expenditures | | | | | 672 |
| Actual Expenditures | | | | | 672 |
| Revenues | | | | | |
| Authorized Positions | | | | | 12 |
| Filled Positions | | | | | 12* |
| Vacancies | | | | | |
| *11 of the 12 positions are temporarily redirected | | | | | |

Workload History

| Workload Measure | PY - 4 | PY - 3 | PY - 2 | PY - 1 | PY | CY |
|--------------------------------------|--------|--------|--------|--------|--------|--------|
| Number of acres surveyed | | | | | 34,880 | 62,560 |
| Number of acres with nutria detected | | | | | 1,520 | 2,120* |
| Number of acres with nutria trapped | | | | | 1,480 | 2,120* |
| Number of trap nights | | | | | 1,562 | 3,890 |

*Values are cumulative across PY and CY

C. State Level Considerations

This Nutria Eradication and Control Program is vital to providing reliable, clean, and safe water and reducing greenhouse gas emissions. Nutria colonies create extensive burrows, which increase soil erosion and sedimentation, reduce bank stability, and increase the risk of levee failure; these nutria colonies are vectors for disease and parasites transmissible through water supplies. Their herbivory is notorious for causing extensive loss of wetland habitat and soils that are critical for carbon sequestration. Further, this program is consistent with California's State Wildlife Action Plan in which invasive species are the most commonly identified pressure across all terrestrial and aquatic conservation targets; direct management of invasive species is one of the strategies most commonly identified as needed to improve ecosystem conditions across California.

The persistence of invasive nutria in California will result in increasingly prevalent impacts to multiple resource sectors, including wildlife and habitat conservation, agriculture, water supplies and conveyance, flood protection, greenhouse gas reduction, and the agencies charged with their management. Departments of Water Resources, Food and Agriculture, Parks and Recreation, and numerous Conservancies will benefit from the Program through protection of resources and damage prevention.

D. Justification

The 2017 discovery of the invasive nutria in California requires an immediate response by the state. Nutria eradication and control has created a new workload for the department, which cannot be absorbed within existing personnel and funding. New invasions typically begin with a few animals being introduced into a new environment followed by a period of slow population increase. When the population size and geographic extent is relatively small, eradication of the population is feasible and efforts are most cost-efficient.

Analysis of Problem

As time advances, the population begins to grow exponentially, the geographic extent is greatly expanded, control efforts become more costly and less efficient, and eradication becomes unlikely. CDFW has a short window of opportunity to eradicate nutria. If denied, CDFW cannot sustain long-term efforts to remove this population in a relatively short timeframe. It is likely there will be increased and extended, if not perpetual, costs to multiple state, federal, and local agencies for population control, infrastructure repairs, and resource damage mitigation.

The structure and overall strategy of the program follows the successful Chesapeake Bay Nutria Eradication Project, which removed over 14,000 nutria in 15 years. In contrast, the State of Louisiana pays \$2M per year in nutria bounties to prevent population growth (i.e. incentive payments for 400,000 nutria per year, in addition to state control and restoration costs) to merely suppress nutria numbers.

This proposal benefits the public through protection of water quality and reliability, protection of levee infrastructure, protection of irrigation systems for agriculture, protection of water conveyance networks by preventing burrowing damage and preventing loss of carbon-sequestering wetland soils for the reduction of greenhouse gases. Private landowners managing wetlands or agricultural operations adjacent to waterways also benefit through prevention of habitat loss, vegetation damage, and crop losses through herbivory.

Positions to Support Nutria Eradication and Control Program

| Positions Requested | Workload | Workload Standard | Basis for Standard |
|---|---|--|---|
| 1.0 Environmental Program Manager I (Supervisory) | Manage the workload and personnel needs of the staff in the Nutria Eradication Program, including a Senior Environmental Scientist (Supervisory), Senior Environmental Scientist (Specialists), 2 or more Environmental Scientists, 4 Fish and Wildlife Technicians, and 3 or more Scientific Aids. Oversee grants and contract, procurement, task assignments, and performance and administrative matters (timesheets, training, etc.) | Consistent with the workload of other EPM I (Sup) staff. | Workload activities reflect typical duties that are required of scientific and technical staff. |
| 1.0 Senior Environmental Scientist (Specialist) | Lead staff for identifying and prioritizing mapping and field survey locations; work with the public and agency staff to secure written permission for CDFW staff to conduct surveys/trapping on all non-CDFW owned properties. | Consistent with the workload of other SES staff. | Workload activities reflect typical duties that are required of scientific and technical staff. |
| 2.0 Environmental Scientists | Lead and conduct field surveys and trapping of nutria. Perform necropsies on nutria captured, outreach to property owners and the public. | Consistent with the workload of other ES staff. | Workload activities reflect typical duties that are required of scientific and technical staff. |
| 4.0 Fish and Wildlife Technicians | Conduct field surveys and trapping of nutria. Build, maintain, and operate Program equipment (traps, cameras, platforms, etc.). | Consistent with the workload of other FWT staff. | Workload activities reflect typical duties that are required of scientific and technical staff. |
| 1.0 Research Data Analyst II | Develop and maintain geospatial data collection applications; maps and resources for the Program; maintain database of all data documenting field efforts; prepare data reports as needed. | Consistent with the workload of other RA staff. | Workload activities reflect typical duties that are required of scientific and technical staff. |
| 1.0 Associate Government Program Analyst | Provide administrative support to the Nutria Program; manage records, process procurement requests, etc. | Consistent with the workload of other AGPA staff. | Workload activities reflect typical duties that are required of administrative staff. |

E. Outcomes and Accountability

CDFW anticipates the project will be fully operational within three years of program set up. Surveys that delineate the range of nutria infestation in California will be completed and locations of reproducing populations will be identified. Concurrent with surveying, trapping will have resulted in the removal of the majority of nutria, with additional, intensified efforts needed to remove remaining nutria that avoided initial removal efforts. In addition to removing nutria, the team will conduct research to develop the most effective methods for trapping and surveillance and conduct education and outreach.

The program's budget will be managed by a fund manager who will be responsible for budgeting, approving, and monitoring expenditures. Annual reports that summarize the program's efforts and accomplishments will be posted on CDFW's website.

Projected Outcomes

| Workload Measure | CY | BY | BY+1 | BY+2 | BY+3 | BY+4 |
|--------------------------------------|---------|---------|---------|---------|---------|---------|
| Number of acres surveyed | 150,000 | 150,000 | 300,000 | 450,000 | 600,000 | 750,000 |
| Number of acres with nutria detected | * | | | | | |
| Number of acres with nutria trapped | * | | | | | |
| Number of trap nights | * | | | | | |

* Future acres in these categories will be dependent upon the number of nutria found during survey efforts.

F. Analysis of All Feasible Alternatives

Alternative 1: Establish Nutria Eradication Program within CDFW – Recommended Alternative

Cost: \$1,949,000 and 10 permanent positions in Fiscal Year 2019-20 and \$1,624,000 ongoing.

Advantage:

- This alternative would transition CDFW's current operations from a program of redirected staff to permanent staff and enable the redirected staff to return to their duties throughout CDFW.
- This level of staffing would allow for geographic coverage by staff across the known range of nutria infestation, allow for flexibility in operations depending on field needs, and have sufficient staff to concurrently survey and remove nutria.

Disadvantage:

- This constitutes a permanent program, requiring ongoing funding and positions.

Alternative 2: Abort eradication; redirect limited staff (3 positions) to control nutria and associated impacts on CDFW lands only.

Cost: \$389,000 ongoing and three positions (incalculable impacts to the natural resources on CDFW properties.)

Advantage:

- Up to 60 redirected staff would cease eradication efforts and return to their prior duties.

Disadvantage:

Nutria reproduction and dispersal is unchecked, and nutria will become established throughout the aquatic habitats of the state threatening public safety and hundreds of millions of dollars of levees, water conveyance, and flood-protection infrastructure.

G. Implementation Plan

Implementation of the proposal would begin July 1, 2019, and/or upon approval of the Fiscal Year 2019-20 Budget. The eradication and control project is already underway with redirected staff and resources.

H. Supplemental Information

Program staff will be based out of three locations spread across the project area and would require office and supply storage space. CDFW will purchase five 4x4 pickup trucks. The distribution for the requested vehicles will be as follows:

- 1 4x4 pickup truck for the requested Environmental Program Manager I (Supervisory)
- 1 4x4 pickup truck for the requested Sr. Environmental Scientist (Specialist)
- 2 4x4 pickup trucks for the requested Environmental Scientists
- 1 4x4 pickup truck for the requested Fish and Wildlife Tech

I. Recommendation

Alternative 1: Approve \$1,949,000 General Fund and 10 positions to eradicate invasive nutria from the State.